Fig. 1

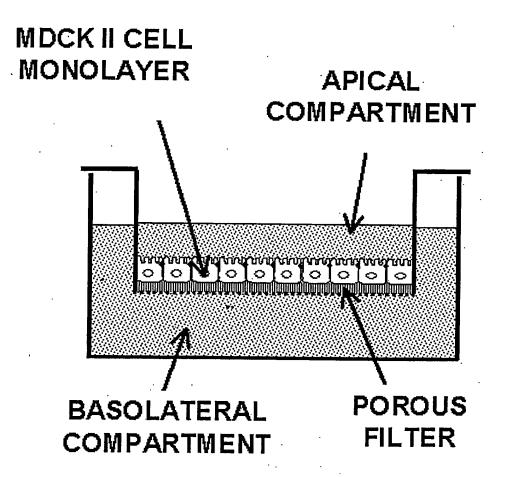


Fig. 2

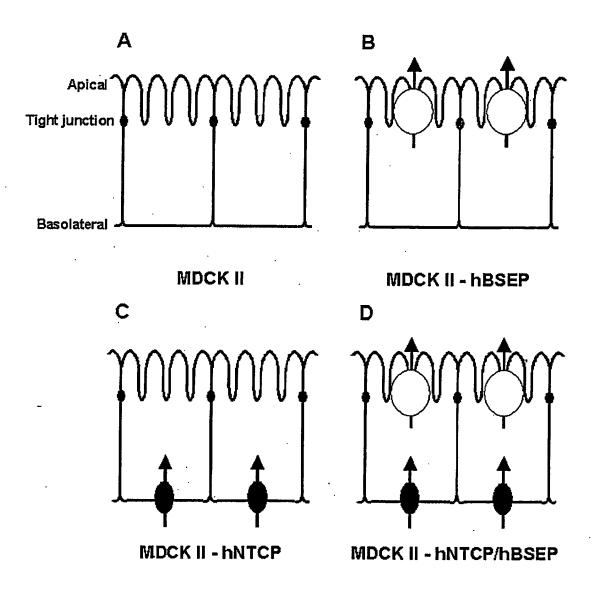
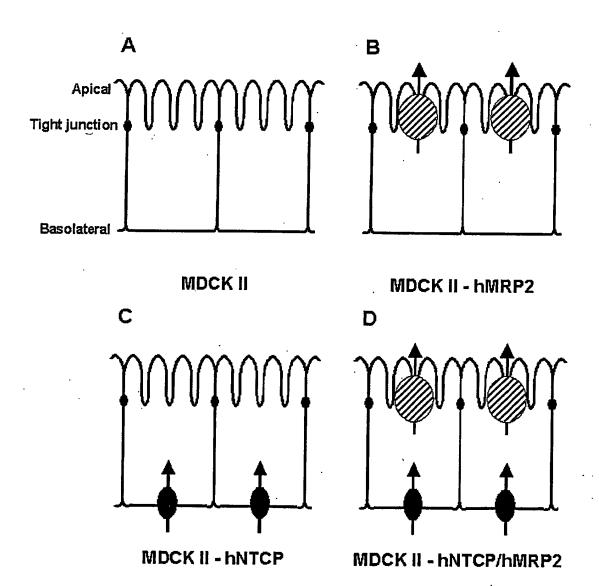
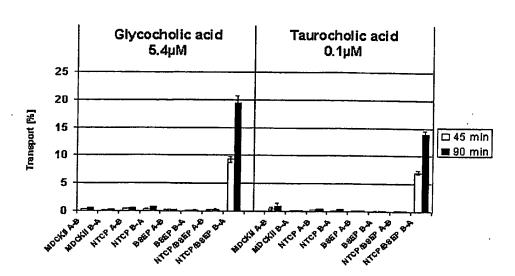


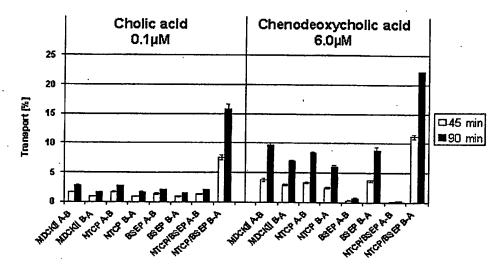
Fig 3



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Fig. 4





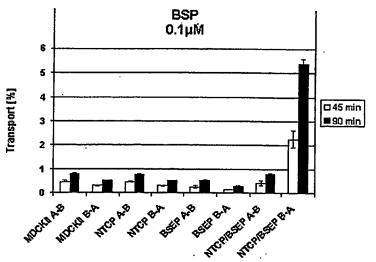
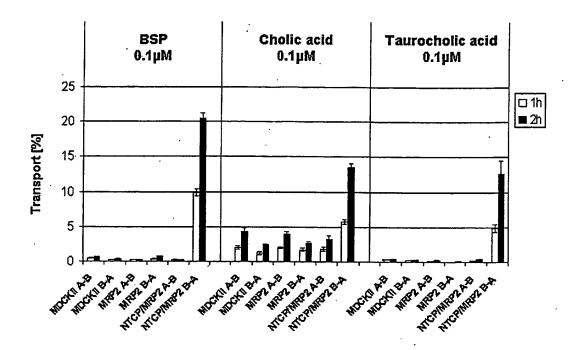


Fig. 5



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Fig. 6

Fig. 7

ATGTCTGACTCAGTAATTCTTCGAAGTATAAAGAAATTTGGAGAGGAGAATGATGGTTTTGAGTCAGATAAATCATATAA TAATGATAAGAAATCAAGGTTACAAGATGAGAAGAAGGTGATGGCGTTAGAGTTGGCTTCTTTCAATTGTTTCGGTTTT CTCATTTTTGGCACAATGACAGATGTTTTTATTGACTACGACGTTGAGTTACAAGAACTCCAGATTCCAGGAAAAGCATG ${\tt TCGAGAGCGAAATGATCAAATTTGCCAGTTACTATGCTGGAATTGCTGTCGCAGTACTTATCACAGGATATATTCAAATA}$ $\tt TGCTTTTGGGTCATTGCCGCAGCTCGTCAGATACAGAAAATGAGAAAATTTTACTTTAGGAGAATAATGAGAATGGAAAT$ AGGGTGGTTTGACTGCAATTCAGTGGGGGAGCTGAATACAAGATTCTCTGATGATATTAATAAAATCAATGATGCCATAG $\tt CTGACCAAATGGCCCTTTTCATTCAGCGCATGACCTCGACCATCTGTGGTTTCCTGTTGGGATTTTTCAGGGGTTGGAAA$ $\tt CTGACCTTGGTTATTATTTCTGTCAGCCCTCTCATTGGGATTGGAGCAGCCACCATTGGTCTGAGTGTCCAAGTTTAC$ GGACTATGAGCTGAAGGCCTATGCCAAAGCAGGGGTGGTGGCTGATGAAGTCATTTCATCAATGAGAACAGTGGCTGCTT TTGGTGGTGAGAAAGGGAGGTTGAAAGGTATGAGAAAAATCTTGTGTTCGCCCAGCGTTGGGGAATTAGAAAAGGAATA GTGATGGGATTCTTTACTGGATTCGTGTGTGTCTCATCTTTTTGTGTTATGCACTGGCCTTCTGGTACGGCTCCACACT TGTCCTGGATGAAGGAGAATATACACCAGGAACCCTTGTCCAGATTTTCCTCAGTGTCATAGTAGGAGCTTTAAATCTTG GCAATGCCTCTCCTTGTTTGGAAGCCTTTGCAACTGGACGTGCAGCAGCCACCAGCATTTTTGAGACAATAGACAGGAAA ${\tt CCCATCATTGACTGCATGTCAGAAGATGGTTACAAGTTGGATCGAATCAAGGGTGAAATTGAATTCCATAATGTGACCTT}$ ${\tt CCATTATCCTTCCAGACCAGAGGTGAAGATTCTAAATGACCTCAACATGGCCATTAAACCAGGGGAAATGACAGCTCTGG}$ $\tt GTGGATGGCCATGACATTCGCTCTCTTAACATTCAGTGGCTTAGAGATCAGATTGGGATAGTGGAGCAAGAGCCAGTTCT$ GTTCTCTACCACCATTGCAGAAAATATTCGCTATGGCAGAGAGATGCAACAATGGAAGACATAGTCCAAGCTGCCAAGG AGGCCAATGCCTACAACTTCATCATGGACCTGCCACAGCAATTTGACACCCTTGTTGGAGAAGGAGGAGGCCAGATGAGTGGTGGCCAGAAACAAAGGGTAGCTATCGCCAGAGCCCTCATCCGAAATCCCAAGATTCTGCTTTTGGACATGGCCACCTC AGCTCTGGACAATGAGAGTGAAGCCATGGTGCAAGAAGTGCTGAGTAAGATTCAGCATGGGCACACAATCATTTCAGTTG $\tt CTCATCGCTTGTCTACGGTCAGAGCTGCAGATACCATCATTGGTTTTGAACATGGCACTGCAGTGGAAAGAGGGACCCAT$ GAAGAATTACTGGAAAGGAAAGGTGTTTACTTCACTCTAGTGACTTTGCAAAGCCAGGGAAATCAAGCTCTTAATGAAGA CCATCCGGCAACGCTCCAAGTCTCAGCTTTCTTACCTGGTGCACGAACCTCCATTAGCTGTTGTAGATCATAAGTCTACC TATGAAGAAGATAGAAAGGACAAGGACATTCCTGTGCAGGAAGAAGTTGAACCTGCCCCAGTTAGGAGGATTCTGAAATT CAGTGCTCCAGAATGGCCCTACATGCTGGTAGGGTCTGTGGGTGCAGCTGTGAACGGGACAGTCACACCCTTGTATGCCT TTTTATTCAGCCAGATTCTTGGGACTTTTTCAATTCCTGATAAAGAGGAACAAAGGTCACAGATCAATGGTGTGTGCCTA $\tt CTTTTTGTAGCAATGGGCTGTGTATCTCTTTTCACCCAATTTCTACAGGGATATGCCTTTGCTAAATCTGGGGAGCTCCT$ AACAAAAAGGCTACGTAAATTTGGTTTCAGGGCAATGCTGGGGCAAGATATTGCCTGGTTTGATGACCTCAGAAATAGCC $\tt CTGGAGCATTGACAAGACTTGCTACAGATGCTTCCCAAGTTCAAGGGGGCTGCCGGCTCTCAGATCGGGATGATAGTC$ AATTCCTTCACTAACGTCACTGTGGCCATGATCATTGCCTTCTCCTTTAGCTGGAAGCTGAGCCTGGTCATCTTGTGCTT $\tt CTTCCCCTTCTTGGCTTTATCAGGAGCCACACAGACCAGGATGTTGACAGGATTTGCCTCTCGAGATAAGCAGGCCCTGG$ AGATGGTGGGACAGATTACAAATGAAGCCCTCAGTAACATCCGCACTGTTGCTGGAAATTGGAAAGGAGGGGGTTCATT ${\tt GAAGCACTTGAGACTGAGCTGGAGAAGCCCTTCAAGACAGCCATTCAGAAAGCCAATATTTACGGATTCTGCTTTGCCTT}$ ${\tt TCAGCTATGTGTTCAGGGTGATCTCTGCAGTTGTACTGCAGTGCAACAGCTCTTGGAAGAGCCTTCTCTTACACCCCAAGT}$ TATGCAAAAGCTAAAATATCAGCTGCACGCTTTTTTCAACTGCTGGACCGACAACCCCCAATCAGTGTATACAATACTGC \cdot AGGTGAAAAATGGGACAACTTCCAGGGGAAGATTGATTTTGTTGATTGTAAATTTACATATCCTTCTCGACCTGACTCGC

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CAGAACGCGGATATCATTGCTGTCATGGCACAGGGGGTGGTGATTGAAAAGGGGACCCATGAAGAACTGATGGCCCAAAA
AGGAGCCTACTACAAACTAGTCACCACTGGATCCCCCATCAGTTGA

Fig. 8

AGTCCAGGAATCATGCTGGAGAAGTTCTGCAACTCTACTTTTTGGAATTCCTCATTCCTGGACAGTCCGGAGGCAGACCT ${\tt GCCACTTTGTTTTGAGCAAACTGTTCTGGTGTGGATTCCCTTGGGCTTCCTATGGCTCCTGGCCCCCTGGCAGCTTCTCCC}$ ACGTGTATAAATCCAGGACCAAGAGATCCTCTACCACCAAACTCTATCTTGCTAAGCAGGTATTCGTTGGTTTTCTTCTT ATTCTAGCAGCCATAGAGCTGGCCCTTGTACTCACAGAAGACTCTGGACAAGCCACAGTCCCTGCTGTTCGATATACCAA TCCAAGCCTCTACCTAGGCACATGGCTCCTGGTTTTGCTGATCCAATACAGCAGACAATGGTGTGTACAGAAAAACTCCT GGTTCCTGTCCCTATTCTGGATTCTCTCGATACTCTGTGGCACTTTCCAATTTCAGACTCTGATCCGGACACTCTTACAG GGTGACAATTCTAATCTAGCCTACTCCTGCCTGTTCTTCATCTCCTACGGATTCCAGATCCTGATCCTGATCTTTTCAGC ATTTTCAGAAAATAATGAGTCATCAAATAATCCATCATCCATAGCTTCATTCCTGAGTAGCATTACCTACAGCTGGTATG ACAGCATCATTCTGAAAGGCTACAAGCGTCCTCTGACACTCGAGGATGTCTGGGGAAGTTGATGAAGAGATGAAAACCAAG GAGCTCCCAGCAGAACTCTGGAGCCAGGCTGCCTGGCTTGAACAAGAATCAGAGTCAAAGCCAAGATGCCCTTGTCCTGG AAGATGTTGAAAAGAAAAAAAAGATCTGGGACCAAAAAAGATGTTCCAAAATCCTGGTTGATGAAGGCTCTGTTCAAA ACTTTCTACATGGTGCTCCTGAAATCATTCCTACTGAAGCTAGTGAATGACATCTTCACGTTTGTGAGTCCTCAGCTGCT GAAATTGCTGATCTCCTTTGCAAGTGACCGTGACACATATTTGTGGATTGGATATCTCTGTGCAATCCTCTTATTCACTG ${\tt CGGCTCTCATTCAGTCTTTCTGCCTTCAGTGTTATTTCCAACTGTGCTTCAAGCTGGGTGTAAAAGTACGGACAGCTATC}$ GATGTCTGTGGATGCCCAGAAGCTCATGGATGTGACCAACTTCATGCACATGCTGTGGTCAAGTGTTCTACAGATTGTCT TATCTATCTTCTTCCTATGGAGAGAGTTGGGACCCTCAGTCTTAGCAGGTGTTGGGGTGATGGTGCTTGTAATCCCAATT AATGCGATACTGTCCACCAAGAGTAAGACCATTCAGGTCAAAAATATGAAGAATAAAGACAAACGTTTAAAGATCATGAA AGAAAGAGCTCAAGAACCTGCTGGCCTTTAGTCAACTACAGTGTGTAGTAATATTCGTCTTCCAGTTAACTCCAGTCCTG GTATCTGTGGTCACATTTTCTGTTTATGTCCTGGTGGATAGCAACAATATTTTGGATGCACAAAAGGCCTTCACCTCCAT TACCCTCTTCAATATCCTGCGCTTTCCCCTGAGCATGCTTCCCATGATGATCTCCTCCATGCTCCAGGCCAGTGTTTCCA CAGAGCGGCTAGAGAAGTACTTGGGAGGGGATGACTTGGACACATCTGCCATTCGACATGACTGCAATTTTGACAAAGCC ATGCAGTTTTCTGAGGCCTCCTTTACCTGGGAACATGATTCGGAAGCCACAGTCCGAGATGTGAACCTGGACATTATGGC AGGCCAACTTGTGGCTGTGATAGGCCCTGTCGGCTCTGGGAAATCCTCCTTGATATCAGCCATGCTGGGAGAAATGGAAA ATGTCCACGGGCACATCACCATCAAGGGCACCACTGCCTATGTCCCACAGCAGTCCTGGATTCAGAATGGCACCATAAAG GACAACATCCTTTTTGGAACAGAGTTTAATGAAAAGAGGTACCAGCAAGTACTGGAGGCCTGTGCTCTCCCCAGACTT GGAAATGCTGCCTGGAGGAGATTTGGCTGAGATTGGAGAGAGGGTATAAATCTTAGTGGGGGTCAGAAGCAGCGGATCA ${\tt CCAAAAAAGGAGGTTTGCTAAGAATCTGAAGACATTTCTAAGACATACAGGCCCTGAAGAGGAAGCCACAGTCCATGAT}$ GGCAGTGAAGAAGAAGACGATGACTATGGGCTGATATCCAGTGTGGAAGAGATCCCCGAAGATGCAGCCTCCATAACCAT CCTTGAAAACTCGGAATGTGAATAGCCTGAAGGAAGAACGAAGAACTAGTGAAAGGACAAAAACTAATTAAGAAGGAATTC ATAGAAACTGGAAAGGTGAAGTTCTCCATCTACCTGGAGTACCTACAAGCAATAGGATTGTTTTCGATATTCTTCATCAT ${\tt CCTTGCGTTTGTGATGAATTCTGTGGCTTTATTGGATCCAACCTCTGGCTCAGTGCTTGGACCAGTGACTCTAAAATCT}$ TCAATAGCACCGACTATCCAGCATCTCAGAGGGACATGAGAGTTGGAGTCTACGGAGCTCTGGGATTAGCCCAAGGTATA . TATCCTTCGAGCACCTATGAGATTTTTTGACACACCCCACAGGCCGGATTGTGAACAGGTTTGCCGGCGATATTTCCA

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 ${\tt CAGTGGATGACACCCTGCCTCAGTCCTTGCGCAGCTGGATTACATGCTTCCTGGGGGATAATCAGCACCCTTGTCATGATCAGGATCATGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGGATCAGATCAGGATCAGGATCAGGATCAGGATCAGATCAGATCAGGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGATCAGA$ ${\tt TACCTCCCGCCAGCTGAGGCGTCTGGACTCTGTCACCAGGTCCCCAATCTACTCTCACCTCAGCGAGACCGTATCAGGTT}$ ${\tt GTCTTTTCCTGGATCACCTCCAACAGGTGGCTTGCAATTCGCCTGGAGCTGGTTTGGGAACCTGACTGTCTTTTTCAGC}$ $\tt CTTGATGATGGTTATTTATAGAGATACCCTAAGTGGGGACACTGTTGGCTTTGTTCTGTCCAATGCACTCAATATCACAC$ AAACCCTGAACTGGCTGGTGAGGATGACATCAGAAATAGAGACCAACATTGTGGCTGTTGAGCGAATAACTGAGTACACA AAAGTGGAAAATGAGGCACCCTGGGTGACTGATAAGAGGCCTCCGCCAGATTGGCCCAGCAAAGGCAAGATCCAGTTTAA CAACTACCAAGTGCGGTACCGACCTGAGCTGGATCTGGTCCTCAGAGGGATCACTTGTGACATTGGTAGCATGGAGAAGA TTGGTGTGGTGGGCAGGACAGGAGCTGGAAAGTCATCCCTCACAAACTGCCTCTTCAGAATCTTAGAGGCTGCCGGTGGT $\tt CCCCATCCTGTTCTCTGGAAGCCTGAGGATGAATCTCGACCCTTTCAACAACTACTCAGATGAGGAGATTTGGAAGGCCT$ $\tt CTGAGCATAGGCCAGAGGCAGCTGCTGGGCAGGGCTCTGCTTCGGAAATCCAAGATCCTGGTCCTGGATGAGGC$ ${\tt CACTGCTGCGGTGGATCTAGAGACAGACATCCATTCAGACGACCATCCAAAACGAGTTCGCCCACTGCACAGTGATCA}$ AGCCCTGAAGAACTGCTACAAATCCCTGGACCCTTTTACTTTATGGCTAAGGAAGCTGGCATTGAGAATGTGAACAGCAC AAAATTCTAG

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Fig. 9

GACGGATCGGGAGATCTCCCGATCCCCTATGGTGCACTCTCAGTACAATCTGCTCTGATGCCGCATAGTTAAGCCAGTAT CAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTGCGCTGCTTCGCGATGTACGGGCCAGATATACGCGTTGACATT GATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAA ${\tt AACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGT}$ ATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACCTTA ${\tt TGGGACTTTCCTACTTGGCAGTACTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTTGGCAGTACATCAA}$ AAAATCAACGGGACTTTCCAAAATGTCGTAACAACTCCGCCCCATTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAG GTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAG GGAGACCCAAGCTGGCTAGCGTTTAAACTTAAGCTTGGTACCGAGCTCGGATCCCAGGAGGATGGAGGCCCACAACGCGT CTGCCCCATTCAACTTCACCCTGCCACCCAACTTTGGCAAGCGCCCCACAGACCTGGCACTGAGCGTCATCCTGGTGTTC ATGTTGTTCTTCATCATGCTCTCGCTGGGCTGCACCATGGAGTTCAGCAAGATCAAGGCTCACTTATGGAAGCCTAAAGG GCTGGCCATCGCCCTGGTGGCACAGTATGGCATCATGCCCCTCACGGCCTTTGTGCTGGGCAAGGTCTTCCGGCTGAAGA ACATTGAGGCACTGGCCATCTTGGTCTGGCTGCTCACCTGGAGGGAACCTGTCCAATGTCTTCAGTCTGGCCATGAAG GGGGACATGAACCTCAGCATTGTGATGACCACCTGCTCCACCTTCTGTGCCCTTGGCATGATGCCTCTCCTCCTGTACAT CTACTCCAGGGGGATCTATGATGGGGACCTGAAGGACAAGGTGCCCTATAAAGGCATCGTGATATCACTGGTCCTGGTTC ATCATTCTCTTGTGCAGTGTGGCCGTCACAGTTCTCTCTGCCATCAATGTGGGGAAGAGCATCATGTTTGCCATGACACC ACTCTTGATTGCCACCTCCCTGATGCCTTCTATTGGCTTCTGCTGGGTTATGTTCTCTCTGCTCTCTTCTGCCTCA ATGGACGGTGCAGACGCACTGTCAGCATGGAGACTGGATGCCAAAATGTCCAACTCTGTTCCACCATCCTCAATGTGGCC TTTCCACCTGAAGTCATTGGACCACTTTTCTTCTTTCCCCTCCTCACATGATTTTCCAGCTTGGAGAAGGGCTTCTCCT CATTGCCATATTTTGGTGCTATGAGAAATTCAAGACTCCCAAGGATAAAACAAAAATGATCTACACAGCTGCCACAACTG AAGAAACAATTCCAGGAGCTCTGGGAAATGGCACCTACAAAGGGGAGGACTGCTCCCCTTGCACAGCCTAGCCCTTCTAG CTTCCTTGACCCTGGAAGGTGCCACTCCCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGG TGCGGTGGGCTCTATGGCTTCTGAGGCGGAAAGAACCAGCTGGGGGTTCTAGGGGGGTATCCCCACGCGCCCTGTAGCGGCG CATTAAGCGCGGCGGGTGTGGTGGTTACGCGCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCCGCTCCTTTCGCT TTCTTCCCTTCCTTTCTCGCCACGTTCGCCGGCTTTCCCCGTCAAGCTCTAAATCGGGGGCTCCCTTTAGGGTTCCGATT TAGTGCTTTACGGCACCTCGACCCCAAAAAACTTGATTAGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGG TTTTTCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAAACTGGAACAACACTCAACCCTATC TCGGTCTATTCTTTTGATTTATAAGGGATTTTGCCGATTTCGGCCTATTGGTTAAAAAATGAGCTGATTTAACAAAAATT ATCTCAATTAGTCAGCAACCATAGTCCCGCCCTAACTCCGCCCATCCCGCCCCTAACTCCGCCCAGTTCCGCCCATTCT CCGCCCATGGCTGACTAATTTTTTTTTTTTTTTTTATCAGAGGCCGAGGCCGCCTCTGCCTCTGAGCTATTCCAGAAGTAGTG AGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCTCCCGGGAGCTTGTATATCCATTTTCGGATCTGATCAAGAGA CAGGATGAGGATCGTTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGGTGGAGAGGCTATTC

GGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTCAGCGCAGGGGCGCCCGGTTCT GATCTCCTGTCATCTCACCTTGCTCCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGA ATCAGGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCCAGCCGAACTGTTCGCCAGGCTCAAGGCGCGCATGCCCGAC GGCGAGGATCTCGTCGTCACCCATGGCGATGCCTGCTTGCCGAATATCATGGTGGAAAAATGGCCGCTTTTCTGGATTCAT CGACTGTGGCCGGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCG GCGAATGGGCTGACCGCTTCCTCGTGCTTTACGGTATCGCCGCTCCCGATTCGCAGCGCATCGCCTTCTATCGCCTTCTT TCCACCGCCGCCTTCTATGAAAGGTTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGA TCTCATGCTGGAGTTCTTCGCCCACCCCAACTTGTTTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAA ATTTCACAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAAACTCATCAATGTATCTTATCATGTCTGT ATACCGTCGACCTCTAGCTAGAGCTTGGCGTAATCATGGTCATAGCTGTTTCCTGTGTGAAATTGTTATCCGCTCACAAT TGCGCTCACTGCCCGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGGGGAGAGGC AGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGC AAAAGGCCAGGAACCGTAAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAAT CGACGCTCAAGTCAGAGGTGGCGAAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCG $\tt CTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGCCGCTTTCTCATAGCT$ $\tt CGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCCACTGG$ TAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAA GAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAA ACCACCGCTGGTAGCGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGAT CTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCT CAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCGTTCATCCATAGTTGCCTGACTCCCGTCGTGTA GATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAG ATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTTGCGCAACGTTGTTGCCATTGCTACAGGCAT CGTGGTGTCACGCTCGTTTGGTATGGCTTCATTCAGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCA GTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAA GTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCA GAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGT TCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTCACCAGCGTTTCTGGGTGAGCAAAAACAGG AAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCCTTTTTCAATATTATT GAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCG CGCACATTTCCCCGAAAAGTGCCACCTGACGTC

Fig. 10

GACGGATCGGGAGATCTCCCGATCCCCTATGGTCGACTCTCAGTACAATCTGCTCTGATGCCGCATAGTTAAGCCAGTAT $\tt CTGCTCCCTGCTTGTGTTGGAGGTCGCTGAGTAGTGCGCGAGCAAAATTTAAGCTACAACAAGGCAAGGCTTGACCGA$ GATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAA $\tt CTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGT$ AACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGACTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGT ATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACCTTA TGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTTGGCAGTACATCAA AAAATCAACGGGACTTTCCAAAATGTCGTAACAACTCCGCCCCATTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAG GTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAG GGAGACCCAAGCTGGCTTAGACTTAAACTTAAGCTATCACAAGTTTGTACAAAAAAGCAGGCTTAGGAATGTCTGACTCA GTAATTCTTCGAAGTATAAAGAAATTTGGAGAGGAGAATGATGTTTTGAGTCAGATAAATCATATAATAATGATAAGAA ATCAAGGTTACAAGATGAGAAGAAAGGTGATGGCGTTAGAGTTGGCTTCTTTCAATTGTTTCGGTTTTCTTCATCAACTG ACAATGACAGATGTTTTTATTGACTACGACGTTGAGTTACAAGAACTCCAGGATTCCAGGAAAAGCATGTGTGAATAACAC CATTGTATGGACTAACAGTTCCCTCAACCAGAACATGACAAATGGAACACGTTGTGGGTTGCTGAACATCGAGAGCGAAA TGATCAAATTTGCCAGTTACTATGCTGGAATTGCTGTCGCAGTACTTATCACAGGATATATTCAAATATGCTTTTGGGTC ATTGCCGCAGCTCGTCAGATACAGAAAATGAGAAAATTTTACTTTAGGAGAATAATGAGAATGGAAATAGGGTGGTTTGA CTGCAATTCAGTGGGGGAGCTGAATACAAGATTCTCTGATGATATAAAAATCAATGATGCCATAGCTGACCAAATGG CCCTTTTCATTCAGCGCATGACCTCGACCATCTGTGGTTTCCTGTTGGGATTTTTCAGGGGTTGGAAACTGACCTTGGTT ATTATTTCTGTCAGCCCTCTCATTGGGATTGGAGCAGCCACCATTGGTCTGAGTGTGTCCAAGTTTACGGACTATGAGCT GAAGGCCTATGCCAAAGCAGGGGTGGTGGCTGATGAAGTCATTTCATCAATGAGAACAGTGGCTGCTTTTGGTGGTGAGA AAAGAGAGGTTGAAAAGGTATGAGAAAAATCTTGTGTTCGCCCAGCGTTGGGGAATTAGAAAAGGAATAGTGATGGGATTC TTTACTGGATTCGTGTGGTGTCTCATCTTTTTGTGTTATGCACTGGCCTTCTGGTACGGCTCCACACTTGTCCTGGATGA AGGAGAATATACACCAGGAACCCTTGTCCAGATTTTCCTCAGTGTCATAGTAGGAGCTTTAAATCTTGGCAATGCCTCTC CTTGTTTGGAAGCCTTTGCAACTGGACGTGCAGCAGCCACCAGCATTTTTGAGACAATAGACAGGAAACCCATCATTGAC TGCATGTCAGAAGATGGTTACAAGTTGGATCGAATCAAGGGTGAAATTGAATTCCATAATGTGACCTTCCATTATCCTTC CAGACCAGAGGTGAAGATTCTAAATGACCTCAACATGGCCATTAAACCAGGGGAAATGACAGCTCTGGTAGGACCCAGTG GAGCTGGAAAAAGTACAGCACTGCAACTCATTCAGCGATTCTATGACCCCTGTGAAGGAATGGTGACCGTGGATGGCCAT GACATTCGCTCTCTTAACATTCAGTGGCTTAGAGATCAGATTGGGATAGTGGAGCAAGAGCCAGTTCTGTTCTCTACCAC CATTGCAGAAAATATTCGCTATGGCAGAGAAGATGCAACAATGGAAGACATAGTCCAAGCTGCCAAGGAGGCCAATGCCT ${\tt ACAACTTCATGGACCTGCCACAGCAATTTGACACCCTTGTTGGAGAAGGAGGAGGCCAGATGAGTGGTCGCCAGAAA}$ CAAAGGTAGCTATCGCCAGAGCCCTCATCCGAAATCCCAAGATTCTGCTTTTGGACATGGCCACCTCAGCTCTGGACAA TGAGAGTGAAGCCATGGTGCAAGAAGTGCTGAGTAAGATTCAGCATGGGCACACAATCATTTCAGTTGCTCATCGCTTGT $\tt CTACGGTCAGAGCTGCAGATACCATCGTTTTGAACATGGCACTGCAGTGGAAAGAGGGACCCATGAAGAATTACTG$ GAAAGGAAAGGTGTTTACTTCACTCTAGTGACTTTGCAAAGCCAGGGAAATCAAGCTCTTAATGAAGAGGACATAAAGGA TGCAACTGAAGATGACATGCTTGCGAGGACCTTTAGCAGAGGGAGCTACCAGGATAGTTTAAGGGCTTCCATCCGGCAAC GCTCCAAGTCTCAGCTTTCTTACCTGGTGCACGAACCTCCATTAGCTGTTGTAGATCATAAGTCTACCTATGAAGAAGAT AGAAAGGACAAGGACATTCCTGTGCAGGAAGAAGTTGAACCTGCCCCAGTTAGGAGGATTCTGAAATTCAGTGCTCCAGA

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AGATTCTTGGGACTTTTTCAATTCCTGATAAAGAGGAACAAAGGTCACAGATCAATGGTGTGTGCCTACTTTTTGTAGCA ACGTAAATTTGGTTTCAGGGCAATGCTGGGGCAAGATATTGCCTGGTTTGATGACCTCAGAAATAGCCCTGGAGCATTGA CAACAAGACTTGCTACAGATGCTTCCCAAGTTCAAGGGGCTGCCGGCTCTCAGATCGGGATGATAGTCAATTCCTTCACT AACGTCACTGTGGCCATGATCATTGCCTTCTCTTTAGCTGGAAGCTGAGCCTGGTCATCTTGTGCTTCTTCCCCTTCTT GGCTTTATCAGGAGCCACACAGCACCAGGATGTTGACAGGATTTGCCTCTCGAGATAAGCAGGCCCTGGAGATGGTGGGAC AGATTACAAATGAAGCCCTCAGTAACATCCGCACTGTTGCTGGAATTGGAAAGGAGAGGCGGTTCATTGAAGCACTTGAG ACTGAGCTGGAGAAGCCCTTCAAGACAGCCATTCAGAAAGCCAATATTTACGGATTCTGCTTTGCCTTTGCCCAGTGCAT CATGTTTATTGCGAATTCTGCTTCCTACAGATATGGAGGTTACTTAATCTCCAATGAGGGGCTCCATTTCAGCTATGTGT TCAGGGTGATCTCTGCAGTTGTACTGAGTGCAACAGCTCTTGGAAGAGCCTTCTCTTACACCCCAAGTTATGCAAAAGCT AAAATATCAGCTGCACGCTTTTTTCAACTGCTGGACCGACAACCCCCAATCAGTGTATACAATACTGCAGGTGAAAAATG GGACAACTTCCAGGGGAAGATTGATTTTGTTGATTGTAAATTTACATATCCTTCTCGACCTGACTCGCAAGTTCTGAATG GTCTCTCAGTGTCGATTAGTCCAGGGCAGACACTGGCGTTTGTTGGGAGCAGTGGATGTGGCAAAAGCACTAGCATTCAG $\tt CTGTTGGAACGTTTCTATGATCCTGATCAAGGGAAGGTGATGATGATGGTCATGACAGCAAAAAAGTAAATGTCCAGTT$ CCTCCGCTCAAACATTGGAATTGTTTCCCAGGAACCAGTGTTGTTTGCCTGTAGCATAATGGACAATATCAAGTATGGAG ACAACACCAAAGAAATTCCCATGGAAAGAGTCATAGCAGCTGCAAAACAGGCTCAGCTGCATGATTTTGTCATGTCACTC CCAGAGAAATATGAAACTAACGTTGGGTCCCAGGGGTCTCAACTCTCTAGAGGGGAGAAACAACGCATTGCTATTGCTCG GGCCATTGTACGAGATCCTAAAATCTTGCTACTAGATGAAGCCACTTCTGCCTTAGACACAGAAAGTGAAAAGACGGTGC AGGTTGCTCTAGACAAAGCCAGAGAGGGTCGGACCTGCATTGTCATTGCCCATCGCTTGTCCACCATCCAGAACGCGGAT ATCATTGCTGTCATGGCACAGGGGGTGGTGATTGAAAAGGGGACCCATGAAGAACTGATGGCCCAAAAAGGAGCCTACTA CAAACTAGTCACCACTGGATCCCCCATCAGTTGAGACCCAGCTTTCTTGTACAAAGTGGTGATTGGTACCGAGCTCGGAT GGTGCCACTCCCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGG GGGTGGGGTGGGGCAGGACAGCAAGGGGGAGTTGGGAAGACAATAGCAGGCATGCTGGGGATGCGGTGGGCTCTATGG CTTCTGAGGCGGAAAGAACCAGCTGGGGCTCTAGGGGGTATCCCCACGCGCCCTGTAGCGGCGCATTAAGCGCGGCGGCT GTGGTGGTTACGCGCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCCGCTCCTTTCGCTTTCTTCCCTTTCT CGCCACGTTCGCCGGCTTTCCCCGTCAAGCTCTAAATCGGGGCATCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACC TCGACCCCAAAAAACTTGATTAGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTCGCCCTTTGACG TTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAAACTGGAACAACACTCAACCCTATCTCGGTCTATTCTTTTGA AACCATAGTCCCGCCCTAACTCCGCCCATCCCGCCCTAACTCCGCCCATTCTCCGCCCCATGGCTGAC TAATTTTTTTATTTATGCAGAGGCCGAGGCCGCCTCTGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGA GGCCTAGGCTTTTGCAAAAAGCTCCCGGGAGCTTGTATATCCATTTTCGGATCTGATCAGCACGTGTTGACAATTAATCA TCGGCATAGTATATCGGCATAGTATAATACGACAAGGTGAGGAACTAAACCATGGCCAAGTTGACCAGTGCCGTTCCGGT ACTTCGCCGGTGTGGTCCGGGACGACGTGACCCTGTTCATCAGCGCGGTCCAGGACCAGGTGGTGCCGGACAACACCCTG ${\tt GCCTGGGTGTGGGGGGCCTGGACGAGCTGTACGCCGAGTGGTCGGAGGTCGTGTCCACGAACTTCCGGGACGCCTC}$ ACTTCGTGGCCGAGGAGCAGGACTGACACGTGCTACGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGGTTGGGCTTC GGAATCGTTTTCCGGGACGCCGGATGATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCCACCCCAACTT

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GTTTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTCACAAATAAAGCATTTTTTCACTGCATT TCATGGTCATAGCTGTTTCCTGTGTGAAATTGTTATCCGCTCACAATTCCACACAACATACGAGCCGGAAGCATAAAGTG TGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTGCGTATTGGGCGCTCTTCCGCTTCCTCG AGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAAGGCCAGCAAAAAGGCCAGGAACCGTAAAAAAGGCCGCGTTGC TGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACA GGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATA $\tt CCTGTCCGCCTTTCTCCCCTTCGGGAAGCGTGGCGCTTTCTCAATGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCG$ TTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAG TCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGG TGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGC ${\tt AAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTCTACGGGGTCTGACGCTCAGTGGAA}$ $\tt CGAAAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAAAAATGAA$ GTTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCA GCGATCTGTCTATTTCGTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATC AGTTCGCCAGTTAATAGTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTCACGCTCGTCGTTTGGTATGGC TTCATTCAGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAAAGCGGTTAGCTCCTTCG GTCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACT GTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACC GAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAAC GTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGA TCTTCAGCATCTTTACTTTCACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAAATGCCGCAAAAAAGGGAATAAG GGCGACACGGAAATGTTGAATACTCATACTCTTTCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGA GCGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGAC GTC

Fig. 11

 ${\tt GACGGATCGGGAGATCTCCCGATCCCCTATGGTCGACTCTCAGTACAATCTGCTCTGATGCCGCATAGTTAAGCCAGTAT}$ $\tt CTGCTCCCTGCTTGTGTTGGAGGTCGCTGAGTAGTGCGCGAGCAAAATTTAAGCTACAACAAGGCAAGGCTTGACCGA$ ${\tt GATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGCGTTACATAA}$ AACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGACTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGT ATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACCTTA TGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTACATCAA AAAATCAACGGGACTTTCCAAAATGTCGTAACAACTCCGCCCCATTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAG GTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAG GGAGACCCAAGCTGGCTAGCAGTCCAGGAATCATGCTGGAGAAGTTCTGCAACTCTACTTTTTTGGAATTCCTCATTCCTG GACAGTCCGGAGGCAGACCTGCCACTTTGTTTTGAGCAAACTGTTCTGGTGTGGATTCCCTTGGGCTTCCTATGGCTCCT GGCCCCTGGCAGCTTCTCCACGTGTATAAATCCAGGACCAAGAGATCCTCTACCACCAAACTCTATCTTGCTAAGCAGG TATTCGTTGGTTTTCTTCTTATTCTAGCAGCCATAGAGCTCGCCCTTGTACTCACAGAAGACTCTGGACAAGCCACAGTC ${\tt CCTGCTGTTCGATATACCAATCCAAGCCTCTACCTAGGCACATGGCTCCTGGTTTTTGCTGATCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAGACAATGCCAATACAGCAATACAGCAATACAGCAATACAGCAATACAGCAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAATACAA$ GTGTGTACAGAAAAACTCCTGGTTCCTGTCCCTATTCTGGATTCTCTGATACTCTGTGGCACTTTCCAATTTCAGACTC $\tt CTGATCCTGATCTTTTCAGCATTTTCAGAAAATAATGAGTCATCAAATAATCCATCATCCATAGCTTCATTCCTGAGTAG$ CATTACCTACAGCTGGTATGACAGCATCATTCTGAAAGGCTACAAGCGTCCTCTGACACTCGAGGATGTCTGGGAAGTTG TGATGAAGGCTCTGTTCAAAACTTTCTACATGGTGCTCCTGAAATCATTCCTACTGAAGCTAGTGAATGACATCTTCACG TTTGTGAGTCCTCAGCTGCTGAAATTGCTGATCTCCTTTGCAAGTGACCGTGACACATATTTGTGGATTGGATATCTCTG TGCAATCCTCTTATTCACTGCGGCTCTCATTCAGTCTTTCTGCCTTCAGTGTTTATTTCCAACTGTGCTTCAAGCTGGGTG GTTGGAGAAACAGTGAACCTGATGTCTGTGGATGCCCAGAAGCTCATGGATGTGACCAACTTCATGCACATGCTGTGGTC AAGTGTTCTACAGATTGTCTTATCTATCTTCCTATGGAGAGAGTTGGGGACCCTCAGTCTTAGCAGGTGTTGGGGTGA TGGTGCTTGTAATCCCAATTAATGCGATACTGTCCACCAAGAGTAAGACCATTCAGGTCAAAAATATGAAGAATAAAGAC CCAAGTACAAAACCTCCGGAAGAAAGAGCTCAAGAACCTGCTGGCCTTTAGTCAACTACAGTGTGTAGTAATATTCGTCT TCCAGTTAACTCCAGTCCTGGTATCTGGTCACATTTTCTGTTTATGTCCTGGTGGATAGCAACAATATTTTGGATGCA ${\tt CAAAAGGCCTTCACCTCCATTACCCTCTTCAATATCCTGCGCTTTCCCCTGAGCATGCTTCCCATGATGATCTCCTCCAT}$ GCTCCAGGCCAGTGTTTCCACAGAGCGGCTAGAGAAGTACTTGGGAGGGGGATGACTTGGACACATCTGCCATTCGACATG ACTGCAATTTTGACAAAGCCATGCAGTTTTCTGAGGCCTCCTTTACCTGGGAACATGATTCGGAAGCCACAGTCCGAGAT ${\tt CATGCTGGGAGAAATGTCCACGGGCACATCACCATCAAGGGCACCACTGCCTATGTCCCACAGCAGTCCTGGA}$ TTCAGAATGGCACCATAAAGGACAACATCCTTTTTGGAACAGGTTTAATGAAAAGAGGTACCAGCAAGTACTGGAGGCC

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 ${\tt CAGTGGATGCTCATGTAGGAAAACATATTTTAATAAGGTCTTGGGCCCCAATGGCCTGTTGAAAGGCAAGACTCGACTC}$ TTGGTTACACATAGCATGCACTTTCTTCCTCAAGTGGATGAGATTGTAGTTCTGGGGAATGGAACAATTGTAGAGAAAGG ATCCTACAGTGCTCTCCTGGCCAAAAAAGGAGAGTTTGCTAAGAATCTGAAGACATTTCTAAGACATACAGGCCCTGAAG AGGAAGCCACAGTCCATGATGGCAGTGAAGAAGAAGACGATGACTATGGGCTGATATCCAGTGTGGAAGAGATCCCCGAAAACTAATTAAGAAGGAATTCATAGAAACTGGAAAGGTGAAGTTCTCCATCTACCTGGAGTACCTACAAGCAATAGGATTG $\tt TTTTCGATATTCTTCATCATCCTTGCGTTTGTGATGAATTCTGTGGCTTTATTGGATCCAACCTCTGGCTCAGTGCTTG$ GACCAGTGACTCTAAAATCTTCAATAGCACCGACTATCCAGCATCTCAGAGGGACATGAGAGTTGGAGTCTACGGAGCTC TGGGATTAGCCCAAGGTATATTTGTGTTCATAGCACATTTCTGGAGTGCCTTTGGTTTCGTCCATGCATCAAATATCTTG $\tt CACAAGCAACTGCTGAACAATATCCTTCGAGCACCTATGAGATTTTTTGACACAACACCCCACAGGCCGGATTGTGAACAG$ GTTTGCCGGCGATATTTCCACAGTGGATGACACCCTGCCTCAGTCCTTGCGCAGCTGGATTACATGCTTCCTGGGGATAA GTTCAGATGTTTTATGTGTCTACCTCCCGCCAGCTGAGGCGTCTGGACTCTGTCACCAGGTCCCCAATCTACTCTCACTT CAGCGAGACCGTATCAGGTTTGCCAGTTATCCGTGCCTTTGAGCACCAGCAGCGATTTCTGAAACACAATGAGGTGAGGA $\tt CTGACTGTCTTTTTCAGCCTTGATGATGGTTATTTATAGAGATACCCTAAGTGGGGACACTGTTGGCTTTGTTCTGTC$ ${\tt CAATGCACTCAATATCACACAAACCCTGAACTGGCTGGTGAGGATGACATCAGAAATAGAGACCAACATTGTGGCTGTTG}$ AGCGAATAACTGAGTACACAAAAGTGGAAAATGAGGCACCCTGGGTGACTGATAAGAGGCCTCCGCCAGATTGGCCCAGC AAAGGCAAGATCCAGTTTAACAACTACCAAGTGCGGTACCGACCTGAGCTGGATCTGGTCCTCAGAGGGATCACTTGTGA CATTGGTAGCATGGAGAAGATTGGTGTGGGGGGGGGACAGGAGCTGGAAAGTCATCCCTCACAAACTGCCTCTTCAGAA TCTTAGAGGCTGCCGGTGGTCAGATTATCATTGATGGAGTAGATATTGCTTCCATTGGGCTCCACGACCTCCGAGAGAAG CTGACCATCATCCCCCAGGACCCCATCCTGTTCTCTGGAAGCCTGAGGATGAATCTCGACCCTTTCAACAACTACTCAGA TGAGGAGATTTGGAAGGCCTTGGAGCTGACCTCAAGTCTTTTGTGGCCAGCCTGCAACTTGGGTTATCCCACGAAG TGACAGAGGCTGGTGGCAACCTGAGCATAGGCCAGAGGCAGCTGCTGTGCCTGGGCAGGGCTCTGCTTCGGAAATCCAAG ATCCTGGTCCTGGATGAGGCCACTGCTGCGGTGGATCTAGAGACAACCTCATTCAGACGACCATCCAAAACGAGTT CGCCCACTGCACAGTGATCACCATCGCCCACAGGCTGCACACCATCATGGACAGGTGACAAGGTAATGGTCCTAGACAACG GGAAGATTATAGAGTGCGGCAGCCCTGAAGAACTGCTACAAATCCCTGGACCCTTTTACTTTATGGCTAAGGAAGCTGGC ATTGAGAATGTGAACAGCACAAAATTCTAGCTTAAGCTTGGTACCGAGCTCGGATCCACTAGTCCAGTGTGGTGGAATTC TGCAGATATCCAGCACAGTGGCGGCCGCTCGAGTCTAGAGGGCCCGTTTAAACCCGCTGATCAGCCTCGACTGTGCCTTC AATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGACAGCAAG GGGGAGGATTGGGAAGACAATAGCAGGCATGCTGGGGATGCGGTGGGCTCTATGGCTTCTGAGGCGGAAAGAACCAGCTG GGGCTCTAGGGGGTATCCCCACGCGCCCTGTAGCGGCGCATTAAGCGCGGGGGGGTGTGGTGGTTACGCGCAGCGTGACCG ${\tt CTACACTTGCCAGCGCCCTAGCGCCCGCTCCTTTCGCTTTCTTCCCTTTCTCGCCACGTTCGCCGGCTTTCCCCGTT}$ CAAGCTCTAAATCGGGGCATCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCCAAAAAACTTGATTAGGG TGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAGTG GACTCTTGTTCCAAACTGGAACAACACTCAACCCTATCTCGGTCTATTCTTTTGATTTATAAGGGATTTTGGGGATTTCG $\tt CGAGGCCGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCTCC$ $\tt CGGGAGCTTGTATATCCATTTTCGGATCTGATCAGCACGTGTTGACAATTAATCATCGGCATAGTATATCGGCATAGTAT$

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GCGGTCGAGTTCTGGACCGACCGGCTCGGGTTCTCCCCGGGACTTCGTGGAGGACGACTTCGCCGGTGTGGTCCGGGACGA CGTGACCCTGTTCATCAGCGCGGTCCAGGACCAGGTGGTGCCGGACAACACCCTGGCCTGGGTGTGGGTGCGCGGCCTGG ACACGTGCTACGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGGTTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCT GGATGATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCCCACCCCAACTTGTTTATTGCAGCTTATAATGGTTAC AAATAAAGCAATAGCATCACAAATTCACAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAAACTCAT GAAATTGTTATCCGCTCACAATTCCACACAACATACGAGCCGGAAGCATAAAGTGTAAAGCCTGGGGTGCCTAATGAGTG AGCTAACTCACATTAATTGCGTTGCGCTCACTGCCCGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAAT CGGCCAACGCGCGGGGAGAGGCGGTTTGCGTATTGGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTCG TTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAG AACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCC CCCTGACGAGCATCACAAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTC CCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGA AGCGTGGCGCTTTCTCAATGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCA CGAACCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTAT CGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGG CCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGG AAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACTCACGTTAAGGGATTTTG TGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCGTTCATCCA TAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCG TCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAAGCGGTTAGCTCCTTCGGTCCTCCGATCGTTGTCAGAAGTAA GTTGGCCGCAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTT $\tt CTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATA$ CGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAAACGTTCTTCGGGGCGAAAACTCTCAAG GATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTCACCA GCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTC ATACTCTTCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTA GAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGACGTC